



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,441	06/26/2003	Daniel J. DeClerck	CE10654R/10-163	2933
22917	7590 08/25/2005		EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD			ORGAD, EDAN	
			ART UNIT	PAPER NUMBER
SCHAUMBU	RG, IL 60196	2684		
			DATE MAILED: 08/25/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/606,441	DECLERCK ET AL.			
		Examiner	Art Unit			
		Edan Orgad	2684			
The MAILING DAT Period for Reply	E of this communication app	ears on the cover sheet with the c	orrespondence address			
THE MAILING DATE OF  - Extensions of time may be availated after SIX (6) MONTHS from the last of the period for reply specified at the period for reply is specified at the period for reply is specified at the period for reply within the set or the period for reply within the period for rep	THIS COMMUNICATION.  ble under the provisions of 37 CFR 1.13 mailing date of this communication.  ble is less than thirty (30) days, a reply above, the maximum statutory period we extended period for reply will, by statute, later than three months after the mailing	'IS SET TO EXPIRE 3 MONTH( 6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE date of this communication, even if timely filed	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).			
Status						
1) Responsive to com	munication(s) filed on <u>13 Ju</u>	ne 2005.				
2a)⊠ This action is FINA		action is non-final.				
Disposition of Claims						
4a) Of the above cl 5) ☐ Claim(s) is/a 6) ☑ Claim(s) <u>1,5,6,10,1</u> 7) ☑ Claim(s) <u>2-4,7-9,12</u>	e pending in the application. aim(s) is/are withdraw are allowed.  1.15,16 and 20 is/are rejected 2-14, 17-19 is/are objected to e subject to restriction and/or	ed. ).				
Application Papers						
10) The drawing(s) filed Applicant may not ref Replacement drawing	quest that any objection to the c g sheet(s) including the correcti	.  ☑ accepted or b) objected to  Irawing(s) be held in abeyance. See on is required if the drawing(s) is objection.	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 1	19	•				
a) All b) Some  1. Certified cop  2. Certified cop  3. Copies of the application from	* c) None of: ies of the priority documents ies of the priority documents e certified copies of the prior om the International Bureau	have been received in Application to the have been received to documents have been received to the have been received to t	on No ed in this National Stage			
Attachment(s)		•	•			
1) Notice of References Cited (P	TO-892)	4) Interview Summary	(PTO-413)			
2) 🔲 Notice of Draftsperson's Pate	nt Drawing Review (PTO-948) nent(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da				

Art Unit: 2684

### **DETAILED ACTION**

## Response to Arguments

Applicant's arguments with respect to claims 1, 5, 6, 10, 11, 15, 16 and 20 have been considered but are moot in view of the new ground(s) of rejection.

It should be noted, that although Zehavi distinguishes between soft handoff as one where the base stations does not send the same power control bit values because they are typically at different locations and a softer handoff is where the base stations disclose identical power control bit values because the base stations are co-located. It is very possible to misconstrue, Zehavi's definition, as a finite definition. Examiner would like point out that is clear from Saints (US 6,097,972), two situations in which a mobile station can receive multiple signal components that contain the same power control command (i.e., soft handoff). The first is when a mobile station receives two or more multi-path signal components from the same base station, in which case it is clear that the power control bits contained in each component are identical (see Saints, col. 3, lines 4-23).

Even though, Saints discloses that when sectorized base stations are used, and a mobile station receives signals from two or more sectors of the same base station, the situation is commonly referred to as a "softer" handoff' while identical power control bits are transmitted from each sector. Saints did clarify, that a soft handoff is when a mobile station receives two or more multi-path signal components from the same base station, in which case it is clear that the power control bits contained in each component are identical.

Furthermore, it should be noted that applicant did not clarify in the claim language that a soft handoff does not include a softer handoff, since there is no mention of the base stations not being co-located.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 6, 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zehavi (US 6,185,199) in view of Saints et al (US # 6,097,972) (US 2002/0072384).

Regarding claim 1, Zehavi teaches a method in a wireless communication system for mitigating power-control errors during a soft handoff of a mobile unit, the method comprising: programming a plurality of base stations with a uniform power-control bit pattern to be sent to the mobile unit during a plurality of power-control bit times, before the mobile unit is acquired on a reverse link (col. 3, lines 1-14).

However, Zehavi teaches a softer handoff is utilized for timing transmissions of the uniform power-control bit pattern such that the plurality of base stations, when transmitting, send identical power-control bits during each of the plurality of power-control bit times (col. 12, lines 49-63). But fails to specifically disclose transmitting for use during a soft handoff of the mobile unit.

Art Unit: 2684

In related art, Saints discloses a soft handoff when a mobile station receives two or more multi-path signal components from the same base station, in which case it is clear that the power control bits contained in each component are identical (see Saints, col. 3, lines 4-23).

Therefore it would have been obvious to one of ordinary skill at the time the invention was made to use Saints teaching of a soft handoff using identical power control bit values with Zehavi in order to provide Zehavi with increased reliability with the power control commands.

Regarding claim 6, 11 and 16, Zehavi teaches an apparatus for use in a wireless communication system for mitigating power-control errors during a soft handoff of a mobile unit, the apparatus for use with a base station of a plurality of base stations attempting to communicate with the mobile unit, the apparatus comprising: a processor for controlling the base station (col. 3, lines 1-14), a memory element coupled to the processor for programming the processor, the memory element comprising a uniform power-control bit pattern to be sent by different ones of the plurality of base stations to the mobile unit during a plurality of power-control bit times, before the mobile unit is acquired on a reverse link (col. 12, lines 49-63); and a synchronizer coupled to the processor for cooperating with the processor to time transmissions of the uniform power-control bit pattern such that the plurality of base stations, when transmitting, send identical power-control bits during each of the plurality of power-control bit times (col. 6, line 66, col. 7, line 10).

However, Zehavi teaches a softer handoff is utilized for timing transmissions of the uniform power-control bit pattern such that the plurality of base stations, when transmitting, send

Art Unit: 2684

identical power-control bits during each of the plurality of power-control bit times (col. 12, lines 49-63). But fails to specifically disclose transmitting for use during a soft handoff of the mobile unit.

In related art, Saints discloses a soft handoff when a mobile station receives two or more multi-path signal components from the same base station, in which case it is clear that the power control bits contained in each component are identical (see Saints, col. 3, lines 4-23).

Therefore it would have been obvious to one of ordinary skill at the time the invention was made to use Saints teaching of a soft handoff using identical power control bit values with Zehavi in order to provide Zehavi with increased reliability with the power control commands.

Claims 5, 10, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zehavi (US 6,185,199) in view of Saints et al (US # 6,097,972) and further in view of Chheda (US 2002/0072384).

Regarding claims 5, 10, 15 and 20, Zehavi fails to specifically disclose timing the transmissions comprises synchronizing the transmissions through a synchronization signal made available to the plurality of the base stations. However, in the same field of endeavor, Chheda discloses timing the transmissions comprises synchronizing the transmissions through a synchronization signal made available to the plurality of the base stations (¶ 0038). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include timing the transmissions comprises synchronizing the transmissions through a synchronization signal made available to the plurality of the base stations in order to provide Zehavi with increased performance during a soft handoff process.

## Allowable Subject Matter

Claims 2-4, 7-9, 12-14 and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 2-4, 7-9, 12-14 and 17-19, please see reasons for allowance in office action dated 3/11/05.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2684

Page 7

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edan Orgad whose telephone number is 571-272-7884. The examiner can normally be reached on 8:00AM to 5:30PM with every other Friday off...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EDAN ORGAD PATENT EXAMINER/TELECOMM.

Lo, 8/12/01